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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,246	06/29/2001	Ronald S. Kolessar	25896.247/P0043A	9192
77182 7590 04/15/2009 KATTEN MUCHIN ROSENMAN LLP / ARBITRON INC. (C/O PATENT ADMINISTRATOR) 2900 K STREET NW, SUITE 200 WASHINGTON, DC 20007-5118				
EXAMINER				
NEWLIN, TIMOTHY R				
ART UNIT		PAPER NUMBER		
2424				
MAIL DATE		DELIVERY MODE		
04/15/2009		PAPER		

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/896,246
Filing Date: June 29, 2001
Appellant(s): KOLESSAR, RONALD S.

Peter Zura
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/24/2008 appealing from the Office
action mailed 12/17/2007

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,647,548

Lu et al.

11-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the Appellant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the Appellant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 8 – 14, 21, 22, 26, 30 – 34, 41, 48, 55 – 59, 66, 67, 74, 81, 85, 88, 91, 94, 101, 104 and 108 are rejected under 35 U.S.C. 102(e) as being anticipated by Lu et al (US 6,647,548).

Regarding claims 1, 22, 41, 48, 67, 74, 81, 88, 91, 94, 101, 104, 111, 112, 120 and 121, Lu discloses a coded/non-coded program audience measurement method and system which determines the program being viewed by detecting ancillary codes received. Lu discloses receiving a program broadcast signal (see col. 6 lines 51 – 58), which includes ancillary codes (see col. 7 lines 10 – 20) for displaying reproducible images on television 24 (see fig 1). The media data, which includes television programming, can also include ancillary codes, but that not all the received media data includes ancillary codes (see col. 8 lines 44 – 60).

Lu further discloses the program media is received at the monitoring site and ancillary data is extracted from the signal. Lu discloses "The sensors 48 are arranged to acquire at least portions of the program signals corresponding to the programs or stations that household members select for viewing on the television 24. These portions of the program signals acquired by the sensors 48 are pre-processed, as desired, by the pre-processing circuit 50. The signal pre-processing circuit 50 supplies pre-processed program signals both to the ancillary code reader 52, which attempts to locate and read ancillary codes from the program signals....". It is noted that Lu discloses a monitoring device with an input to receive the media data and a first processor coupled to the monitoring device for performing the above functions.

Lu still further discloses storing and transmitting the data to a central office for processing. Lu discloses "The major function of the central office apparatus 32 is that of identifying viewed programs. For this purpose, the central office apparatus 32 retrieves all of the tuning records 90 from all of the statistically selected households 12." Lu

further discloses "*A block 110 determines whether the tuning records 90 from the statistically selected households 12 include ancillary codes in the code field 96. If the tuning records 90 from the statistically selected households 12 include ancillary codes in the code field 96, the ancillary codes are subjected to sanity processing by a block 12.*"

It is noted that Lu discloses the first communications device for sending the data set to the remote central office and a second communication device at the office for receiving the data set

Thus, Lu discloses forming a data set comprising extracted ancillary codes for transmission from the user site to the remote central office via a public switched telephone network 42 (see col. 7 lines 1 – 5). It is noted that a data set for transmission via a telephone network must inherently be formed.

It is further noted that the central office processes (by a second processor) the ancillary codes, thus the transmitted data is such to sufficiently decode the ancillary codes for processing to determine the correlation of ancillary codes with the program records stored (see col. 13 lines 17 – 25).

As to claims 8, 9 and 117, Lu discloses the media data comprises audio and video data (see col. 6 lines 51 – 65).

As to claims 10, 30 and 55 Lu discloses a radio broadcast or audio cable transmissions for receiving the media data (see col. 6 lines 63 – 65) and thus discloses the claimed acoustic energy.

As to claims 11, 12, 31, 32, 56, 57, 118 and 126, Lu discloses a fiber optic system for receiving the media data (see col. 6 lines 56 – 58) and thus discloses the claimed electromagnetic energy and light energy inherent to fiber optical communication systems.

As to claims 13, 33 and 58 Lu discloses detecting media from microphones and thus discloses magnetic energy (see col. 7 lines 32 – 55). It is noted that Appellants disclose magnetic energy is associated with a speaker.

Regarding claims 14, 34 and 59, Lu discloses receiving media data signals via coaxial cable and thus discloses electrical energy inherent to coaxial cable systems (see col. 6 lines 55 – 57).

Regarding claims 21, 26, 66, 85, 108 and 119, Lu discloses receiving media data in a portable monitoring device carry able on the person of a user (see col. 6 lines 18 – 22, col. 9 line 48 – col. 10 line 9).

Regarding claims 127-142, Lu further discloses in an incorporated and commonly assigned reference (US 4,697,209) (column 3, lines 30-55, column 8, lines 33-35 and column 10, lines 51-58) that if ancillary codes are not detected in the data set, producing a signature characterizing the media data and matching the produced

signature with a reference signature associated with identification data for the media data (column 3, lines 30-55).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 5- 7, 15 – 20, 27 – 29, 35 – 40, 42 – 47, 49, 52 – 54, 60 – 65, 68 – 73, 75 – 80, 82, 86, 87, 89, 90, 92, 93, 95, 99, 100, 102, 103, 105, 109 and 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu (6,647,548).

Regarding claims 20, 40, 47, 65, 73 and 80 Lu discloses "...it will be understood that program signals can be transmitted and/or distributed by a wide variety of means..." (see col. 6 lines 55 – 60) but Lu fails to disclose detecting a spread spectrum code as the ancillary code.

Official Notice is taken it would have been well known to transmit media data via spread spectrum code to enable transmission over a wireless communication medium. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lu to include the claimed limitation to provide communication over a wireless network.

Regarding claims 2, 15, 23, 35, 42, 49, 60, 68, 75, 82, 86, 89, 92, 95, 99, 102, 105, 109, 113 and 122, Lu discloses transmitting a portion of the media data received to the central office by transmitting a data set via a public switched telephone network but fails to disclose transforming the data into frequency-domain data. Official Notice is taken that it would have been well known to frequency division multiplex data by transforming the data into frequency-domain data for the benefit of maximizing bandwidth efficiency. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lu to include transforming, transmitting, receiving and processing the media data or ancillary codes in the frequency domain for the benefit of maximizing bandwidth efficiency.

Regarding claims 5, 27, 52, 114 and 123, Lu discloses transmitting a portion of the media data received to the central office by transmitting a data set via a public switched telephone network but fails to disclose transforming the data into time domain information. Official Notice is taken that it would have been well known to time division multiplex by transforming the data into time domain data for the benefit of maximizing bandwidth efficiency. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lu to include transforming, transmitting, receiving and processing the media data or ancillary codes in the time domain for the benefit of maximizing bandwidth efficiency.

As to claims 6, 28, 53, 115 and 124, Lu discloses the data set is a subset of the media data, and as discussed above, it would have been obvious to modify Lu to include transforming the data into the time domain. Necessarily, since the data set is smaller than the media data, it inherently has a frequency range narrower than that of the media data.

Regarding claims 7, 29, 54, 116 and 125, Lu fails to disclose wherein the data set comprises data representing phase information.

Official Notice is hereby taken that transmitting data as phase information would have been known to maximize transmission and / or bandwidth efficiency. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lu to include the claimed limitation for the benefit of maximizing transmission and / or bandwidth efficiency.

As to claims 16, 36, 43, 61, 69, 76, 87, 90, 93, 100, 103 and 110, as discussed above, it would have been obvious to modify Lu to convert, transmit, receive and process data in the frequency domain. Necessarily, the frequency-domain data would have been processed to detect components of the ancillary codes at predetermined frequencies.

Regarding claims 17, 37, 44, 62, 70 and 77, Lu fails to disclose wherein the frequency-domain data or ancillary data is distributed according to a frequency-hopping pattern. Official Notice it would have been well known to distribute data via a frequency-hopping pattern to provide a wireless communication system, which maximizes the efficiency of the available bandwidth. For example, in the telecommunications art, it would have been notoriously well known to transmit cellular telephonic data using a frequency hopping technique. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lu to include the claimed frequency-hopping pattern for the benefit of having a wireless communication system, which maximizes the efficiency of the bandwidth available.

Regarding claims 18, 19, 38, 39, 45, 46, 63, 64, 71, 72, 78 and 79 Lu fails to disclose wherein the code components comprise pairs of frequency components modified in amplitude to encode information and fails to disclose wherein the code components comprise pairs of frequency components modified in phase to encode information.

Official Notice is hereby taken that it would have been well known modify pairs of frequency components in amplitude or phase to encode information for the benefit of maximizing transmission efficiency and/or bandwidth efficiency. Therefore, one having ordinary skill in the art at the time the invention was made would have been able to modify Lu to include modify pairs of frequency components in amplitude or phase to

encode information for the benefit of maximizing transmission efficiency and/or bandwidth efficiency.

(10) Response to Argument

The Appellant argues that the § 102 rejection is improper because Lu fails to teach every limitation of claims 1, 22, 41, 48, 67, 74, 81, 88, 91, 94, 101, 104, 111 and 120. In particular, Appellant believes that Lu fails to teach "at the remotely located processing system, processing the data set to decode the ancillary codes." The main point of contention is the Examiner's construction of the claimed "decoding" and whether Lu meets that limitation. Appellant's argument relies on a narrow construction of "decoding" to distinguish over the various functions of Lu that are relied upon in the rejection. The Office position is that the claimed decoding is broad enough that Lu does read on it in several ways.

As defined in by IEEE, the plain meaning of "decode" is "to convert data by reversing the effect of previous encoding." IEEE 100, The Authoritative Dictionary of IEEE Standards Terms, 7th ed., 2000. Thus, the claimed decoding is broadly construed to encompass any conversion of the ancillary codes from one form to another. The claims are also read in light of the specification, which does describe the decoding process in more detail. See, *e.g.*, Specification, paras. [00035] and [00039].

However, the claimed decoding is not construed in the narrow sense relied on by the Appellant's argument, for several reasons. First, while claim language is interpreted in light of the specification, limitations from the specification are not read into the claims

themselves. *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In the rejected claims, the Appellant chose not to recite decoding details such as whether a frequency hopping or amplitude modification scheme is used. Claim 1 merely recites "processing the data set to decode the ancillary codes;" using only the broad term "processing" to describe what occurs at the remotely located site.

Furthermore, in the dependent claims that follow, the Appellant does explicitly recite methods of encoding the data set that is subsequently decoded at the remote processing system. Claim 3, for example, describes forming a data set using amplitude data for a plurality of frequency ranges to represent ancillary codes. Were similar language included in claim 1 to describe the decoding process, it would distinguish over Lu. Indeed, that is why claims 3 and 4 were deemed allowable if re-written in independent form. Final Rejection mailed 12/17/2007, p. 11. Instead, claim 1 uses only the broad language "processing...to decode," and it is construed accordingly.

Finally, the specification is not read into the rejected claims because it describes several methods by which an ancillary code may be decoded (Specification, para. [00039]), while the recited "decoding" of claim 1 could encompass any of the described techniques. "[A] particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment." *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004).

For the reasons above, the Examiner believes that the recited "decoding" is reasonably construed as transforming or converting the ancillary codes from one

descriptive form to another. Given this broad interpretation, at least one function that takes place at the central office can be considered decoding.

The interpretation of the ancillary codes by block 24 in Fig. 5 meets the recited "at the remotely located processing system, processing the data set to decode the ancillary codes." Prior to this step, the tuning records, including the ancillary codes, are transmitted to the central office. Once received at the central office, "block 124 correlates the ancillary codes and channel status information with the program records stored in the program library 88 in order to identify the programs to which the television 24 was tuned." Col. 13, ll. 18-21. In other words, the ancillary codes are transformed from abstract "codes" into program names. It is the Office position that this constitutes decoding of the ancillary codes at the central office.

The Appellant focuses on the decoding that has already taken place at the subscriber site, which transformed the codes from electronic signals into strings of letters. The Office Action does not dispute that Lu performs code reading at the subscriber site; however, that does not preclude the further steps that Lu performs at the central site from meeting the broad "decoding" limitation. Moreover, although the ancillary codes have been translated into strings of letters at the subscriber site, they have not been processed so that they actually identify a program. Thus Lu meets the claimed "forming, without processing the media data sufficiently to decode the ancillary codes, a data set in the monitoring device."

For the reasons stated above, Lu meets the limitations of independent claims 1, 22, 41, 48, 67, 74, 81, 88, 91, 94, 101, 111, and 120, and the rejections should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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